

IN THE CLAIMS:

1. (currently amended) An ink jet printhead for an ink jet printer, comprising a semiconductor substrate containing ink ejection devices, a thick film layer attached to the substrate, and a nozzle plate attached to the thick film layer, the nozzle plate containing a plurality of ink ejection nozzles corresponding to the ink ejection devices, and the printhead containing flow features having a height dimension and a width dimension formed therein for flow of ink from an ink feed slot through ink flow channels in the thick film layer to the plurality of ink ejection devices for ejection through the nozzles, wherein at least a portion of the flow feature dimensions for at least one of the ejection devices is formed in both the thick film layer and laser ablated in the nozzle plate, and wherein the thick film layer contains at least 12 % of the flow feature dimensions.

2. (original) The ink jet printhead of claim 1 wherein the flow features include an ink chamber and an ink flow channel in flow communication with the ink chamber.

3. (original) The ink jet printhead of claim 1 wherein the printhead comprises substantially all of the flow features formed in both the nozzle plate and the thick film layer.

4. (original) The ink jet printhead of claim 1 wherein the nozzle plate has a thickness ranging from about 25 to about 70 microns.

5. (original) The ink jet printhead of claim 4 wherein the ink ejection nozzles have a bore length ranging from about 20 to about 65 microns.

6. (original) The ink jet printhead of claim 4 wherein the thick film layer has a thickness ranging from about 5 to about 15 microns.

7. (original) The ink jet printhead of claim 6 wherein the flow features have a height dimension ranging from about 5 to about 30 microns.

8. (original) The ink jet printhead of claim 7 wherein about 20 to about 80 % of the flow features height dimension is formed in the nozzle plate.

9. (original) The ink jet printhead of claim 1 wherein the flow features laser ablated in the nozzle plate have at least two different height dimensions.

10-15 (Cancelled)

16. (canceled)

17. (currently amended) An ink jet printhead comprising:

a ~~semiconductor~~ substrate having ink ejection devices thereon;

a thick film layer attached to the substrate and having first portions of ink flow features including an ink chamber and an ink flow channel in flow communication with the ink chamber formed therein for flow of ink from an ink feed slot through the flow channel to the ink chamber; and

a nozzle plate attached to the thick film layer opposite the ~~semiconductor~~ substrate, the nozzle plate defining ink ejection nozzles and containing second portions of ink flow features formed therein by laser ablation,

wherein the first portions are at least 12% of a total of the first and second portions.

18. (canceled)

19. (original) The ink jet printhead of claim 17 wherein the nozzle plate has a thickness ranging from about 25 to about 70 microns.

20. (original) The ink jet printhead of claim 19 wherein nozzle plate contains ink ejection nozzles having a bore length ranging from about 20 to about 65 microns.

21. (original) The ink jet printhead of claim 19 wherein the thick film layer has a thickness ranging from about 5 to about 15 microns.

22. (original) The ink jet printhead of claim 21 wherein the flow features have a height dimension ranging from about 5 to about 30 microns.

23. (original) The ink jet printhead of claim 22 wherein about 20 to about 80 % of the flow features height dimension is formed in the nozzle plate.